

ABSTRACT

PROCESS FOR PRODUCING HYDROCARBON OIL

5 A method for manufacturing a hydrocarbon oil, comprising: a
first step wherein a feedstock oil containing an oxygen-containing
organic compound and a water-insoluble chlorine-containing compound
is brought into contact with a hydrogenation catalyst comprising a
support containing a porous inorganic oxide and one or more metals
10 selected from Group VIA and Group VIII of the periodic table
supported on the support in the presence of hydrogen to generate a
hydrocarbon oil and water in a vapor state by the hydrodeoxygenation
of an oxygen-containing organic compound and convert the water-
insoluble chlorine-containing compound into a water-soluble chlorine-
15 containing compound; a second step wherein the water in the reaction
product of the first step is maintained in a vapor state and the reaction
product of the first step is brought into contact with a nitrogen-
containing Brønsted base compound which has a boiling point at normal
pressure of 100°C or less and is water-soluble to obtain a product to be
20 treated; and a third step wherein the product to be treated is cooled to a
temperature not higher than the temperature at which water in a vapor
state is liquefied to form an aqueous phase containing a water-soluble
chlorine-containing compound and a nitrogen-containing Brønsted base
compound and then separate the aqueous phase from an oil to be treated
25 to obtain a product oil containing a hydrocarbon oil.
No figure.